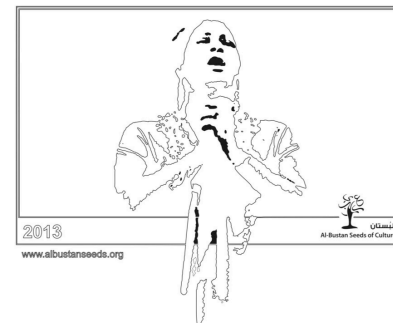


Al-Bustan Camp - July 2013
Science Teacher: Hope Willoe



Science Curriculum

Most of the science activities were based on the Land and Water Kit from the Science and Technology Concepts™ Curriculum developed by the Smithsonian.

Geology and mineral lessons were based on the K12 Earth Science Curriculum.

Links:

<http://www.carolinacurriculum.com/stc/Elementary/Land+and+Water/index.asp>

<http://www.k12.com/courses/k-8-courses/sc6f1b#.UfvLj2Q-sVt>

The main themes covered in science class included: comparing ecosystems, classification, rocks & minerals, engineering with pyramids, and land & water

Grades K-2 45 min lessons

Week 1

Day 1 Theme: Intro Day & Habitat

Activities:

- Ice breaker- name game,
- Go over rules,
- What a habitat and ecosystem is: brainstorm list on board, draw picture of it

Day 2 Comparing Ecosystems

Activities:

- Read story about African habitat,
- Compare and contrast ecosystem of Philadelphia and Egypt,
- Take walk outside record results

Day 3 Comparing Ecosystems

Activities:

- Talk about what we noticed for the Philadelphia ecosystem,
- Look at pictures of Egypt,
- Break down misconceptions of Egypt- dry, talk about how water changes the area,
- Fresh vs. salt water activity

Day 4 Animal Adaptations

Activities:

- Animal features that allow them to survive in their habitat,
- Create animal with labeled features- optimal for Egypt
- Go outside talk about what the area & animals would be like if we were in Egypt- journal as if we were travelers

Week 2

Day 1 Intro to classifications

Activities:

- Bird picture classification activity
- How and why we classify

Day 2 Plant classification

Activities:

- Historical significance of classification- book of plants in ancient Egypt
- Plant classification with pictures
- Outside- list your own system

Day 3 Rocks and mineral classification

Activities:

- Presence of rock and minerals in Egypt
- Observing and classifying the rocks and minerals

Day 4 Pyramids

Activities:

- Read pyramid story (possible video? or take them outside to read story)
- Make own amulet
- Make paper pyramid

Grades 3-8: 1 hour Lessons

Week 1

Day 1 Intro and Water in Egypt

Activities:

- Ice breaker- name game,
- Go over rules
- Ecosystem of Egypt

- What we know about land and water
- Outside to observe land and water

Day 2 Water Cycle

Activities:

- Pictures of landforms shaped by water
- Set up stream tables
- Model water cycle

Day 3 Streams and Rivers

Activities:

- Work with stream table- stream investigation (creating a stream)
- Outside to observe actual stream

Day 4 Dams

Activities:

- Build dam in stream table
- Go to creek try to construct dam out there

Week 2

Day 1 Rocks and Mineral

Activities:

- Brainstorm where they are in Philadelphia
- Classification activity,
- Presence of rock and minerals in Egypt

Day 2 Rocks and Mineral

Activities:

- Rock walk
- Read on rocks and minerals in Africa
- Make own amulet

Day 3 Pyramids

Activities:

- Read pyramid story
- Older students- rehearse and then perform pyramid play for younger students
- Possible video?
- Simulated walk around pyramid

Day 4 Structures

Activities:

- Connect pyramids to engineering- build sledge
- Make paper pyramids
- Then use materials (marshmallows and popsicle sticks) to try to create our own structures